

**WHAT IS CLAIMED IS:**

1. A disk apparatus that performs information reproduction by irradiating a laser beam onto a disk recording medium rotated in a CAV system, comprising:

5 a determining means for determining a reference reproduction laser power value by performing a test writing and a test reading on said disk recording medium at a linear velocity of a predetermined zone in a ZCAV system;

a specifying means for specifying a linear velocity at a portion to which said laser beam is to be irradiated when performing said information reproduction; and

10 a calculating means for calculating an optimal reproduction laser power value on the basis of said reference reproduction laser power value and the linear velocity specified by said specifying means.

2. A disk apparatus according to claim 1, wherein said calculating means obtains said optimal reproduction laser power value by multiplying said reference reproduction laser power value by a proportional coefficient being proportional to the linear velocity.

15 3. A disk apparatus according to claim 2, further comprising

an obtaining means for obtaining an ambient temperature of said disk recording medium; and

a correcting means for correcting said proportional coefficient on the basis of said ambient temperature, wherein

20 said calculating means multiplies said reference reproduction laser power value by the proportional coefficient corrected by said correcting means.

4. A disk apparatus according to any one of claims 1 to 3, wherein said reference reproduction laser power value is obtained by adding a predetermined ratio of a lower limit reproduction laser power value to a lower limit reproducible reproduction laser power value.

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5. A disk apparatus according to any one of claims 1 to 3, wherein said reference reproduction laser power value subtracts a predetermined ratio of an upper limit reproduction laser power value from an upper limit reproducible reproduction laser power value.

5           6. A disk apparatus according to claim 1, wherein the linear velocity of said predetermined zone is a linear velocity of an innermost periphery in a ZCAV system.

          7. A disk apparatus according to claim 1, wherein the linear velocity of said predetermined zone is a linear velocity of an outermost periphery in a ZCAV system.